

**REMARKS**

Claims 1, 2 and 4 are pending in this application. By this Amendment, claims 1 and 4 are amended and claim 3 is canceled without prejudice or disclaimer. No new matter is added by this Amendment. Reconsideration based on the Amendment and following remarks are respectfully requested.

**I. The Claims Define Allowable Subject Matter**

The Office Action rejects claim 1 under 35 U.S.C. §102(b) over U.S. Patent Application Publication No. 2002/0178707 to Vance et al. (hereinafter "Vance"). The Office Action rejects claims 1 and 2 under 35 U.S.C. §102(b) over WO 00/01463 to Haj et al. (hereinafter "Hog"). The Office Action rejects claim 3 under 35 U.S.C. §103(a) over Hog in view of U.S. Patent No. 5,384,110 to Miramatsu et al. (hereinafter "Miramatsu"). The Office Action rejects claim 4 under 35 U.S.C. §103(a) over Hodge and Miramatsu, and further in view of EP 10 18357 A1 to Loncke. The rejections are respectfully traversed.

With regard to Miramatsu, Applicants respectfully submit that Miramatsu fails to suggest the formation of high-density, thin-layer portions as presently claimed. Miramatsu is silent as to a use of the colander type honeycomb structure or the plugging of the structure at alternate ends. Indeed, the honeycomb structure as used in examples and comparative examples of Miramatsu are all dish-type. This is clear as one compares the dimensional descriptions between the present application at, for example, paragraph 90, and those of Miramatsu. Thus, it is quite clear that the term "outlet side" used in Miramatsu means "the downstream side of the dish-type structure," but not the inner side cells whose inlet side is plugged. For example, please see support for the phrase "one side) at col. 5, lines 17-36, col. 7, lines 16-23 and col. 7, line 25 of Miramatsu.

One of the major roles of the high-density, thin-layer portion provided on the "outlet side" of the disk in the device disclosed by Miramatsu should be to hinder the smooth flow of

exhaust gas from the inlet side to the outlet side, in order to force at least some of exhaust gas penetrated into the low-density portions of the wall portions upstream, thereby the exhaust gas is made to contact with the catalyst carried in those portions. This role quite similar to the one described on page 13, lines 13-15 of WO '463; that is, to ensure promotion of oxidation at the outlet side of the dish-type honeycomb or foam structure.

Furthermore, the method disclosed in Miramatsu cannot retain the original porosity of the so-called "honeycomb structure" before coating the high-density, thin-layer portion with a second catalyst. The catalyst would be caught by the pore; that is, the catalyst would fill some portions of the pores existing on the surface with the high-density, thin-layer portion. In this respect, please see page 2, line 18-31, and page 15, lines 9-13 of WO '463. Thus, there is no guarantee, in the method disclosed by Miramatsu, of the retention of the porosity of 40-70% after loading the catalyst on the high-density, thin-layer portion, as described on col. 7, line 55-col. 8, line 2 of Miramatsu. Indeed, one of ordinary skill in the art would not consider the retention of porosity after carrying the catalyst, judging from the description of col. 5, lines 17-36 of Miramatsu, as discussed above.

Additionally, in light of the description at col. 7, lines 42-44 of Miramatsu, and that on page 2, lines 25-28 of WO '463, we do not believe one of ordinary skill in the art would combine the teachings of Miramatsu with those of WO '463. Specifically, the technology disclosed by Miramatsu is entirely irrelevant to the colander type honeycomb structure; at most, one may say that this technology belongs to the conventional technology described on page 14, lines 21-28 of WO '463.

In columnar type honeycomb structures like those presently claimed, the term "outlet side" usually means the side of the end portion of the downstream, but does not mean the inner surface of the cells whose inlet side is plugged. Accordingly, please see the description

on page 17, lines 11-13 of WO '463. The formation of the membrane by applying on the outlet side can be possible only when the inlet side of the cell (channels) is closed (plugged).

By the foregoing, it is respectfully submitted that WO '463, either alone or in combination with Miramatsu, fails to teach or suggest the currently claimed combination of features as recited in the claims as amended. Accordingly, withdrawal of the rejections is respectfully requested.

## **II. Conclusion**

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of the claims are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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Attachment:  
Request for Continued Examination

Date: February 21, 2008

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